

The Value of Artificial Intelligence and Advanced Analytics in Identifying and Reducing Workers' Compensation Fraud

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A hand in a dark suit jacket points its index finger towards the word 'BENEFIT'. The hand is positioned on the left side of the frame, with the finger pointing towards the center-right. The background is a deep blue with a pattern of glowing hexagons and faint binary code (0s and 1s) scattered across it.

BENEFIT

What are?
— your —
Goals





Strategic Planning - Rule of 3:

1. State the problem
2. Discover the possibilities
3. Execute

Problem Solving

Data Silos

Who is your customer?

What do they want?

Why claims?

How can I help?

*Product/
Pricing/
Coverage
Gaps*

Big Data

*Social data
- too much
noise,
copyright
issues*

*3rd Party
data - -
Which
ones?*

*Relevance -
- How ?*

Manual Process

*Patterns in
numerous
claims
(volume)*

*Litigation
risks*

*Time
consuming*

Dependencies

Rising Claim Expenses

Pay or deny?

*Rising
severity of
claims*

*Common
patterns,
trends of
questionable
claims (FWA)*



Dynamic Modeling - Rule of 3:

1. Gather data
2. Enrich external data, integrate and analyze
3. Make the right decision

The Main 4 for WC

- **Robotic Process Automation (RPA)**
- **Operational Intelligence**
- **Analytics - Deep Learning**
- **Dynamic Predictive Modeling**

**MACHINE
LEARNING**

Data
mining

Artificial
intelligence

Prediction

Analysis

Advanced Analytics - WC Context

Dynamic Modeling

AUTOMATION

01

Automated data gathering
Data enrichment
Referral speed and accuracy

Right Data

OPERATIONAL INTEL

02

Provider validation,
ICD Codes NDC
Codes, medical
necessity, context
based social media

Right Time

ANALYTICS

03

Patterns, machine
learning,
underwriting risk,
severity of claims,
loss ratios, Rx (NDC),
claim expense and
reserves, injury
patterns

Right Person

DEEP LEARNING

04

Impact - core
business process,
high data volume,
correlations, connect
the data silos

Right Decision

PREDICTIVE MODELING

05

Dynamic patterns,
litigation severity,
risks, losses

Future

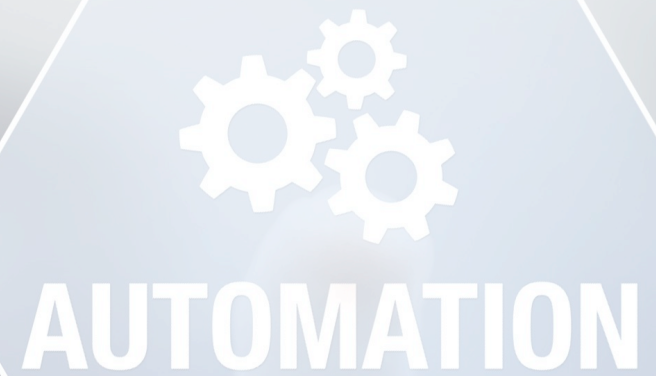
Advanced Analytics

Automation Continuum

Artificial Intelligence

Robotic Process Automation (RPA)

- **Gather, collate and validate information**
- **Synthesize and analyze structured & unstructured data**
- **Calculate and decide what to do**
- **Communicate and assist users, clients & customers**
- **Orchestrate & manage activities**
- **Monitor, detect and report operational performance**
- **Learn, anticipate & forecast behavior & outcomes**



One Day



*“Does your car have any idea why
my car pulled it over?”*



NETWORK
CONNECTIVITY



BIG DATA



SMART GRID



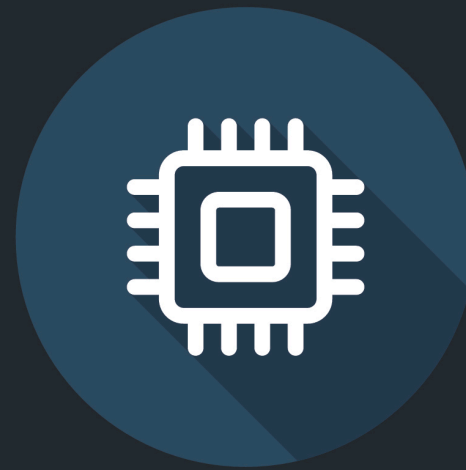
HEALTHCARE
SYSTEMS



INFRASTRUCTURE
MANAGEMENT



AUTOMATION



CYBER-PHYSICAL
SYSTEM



SMART HOME

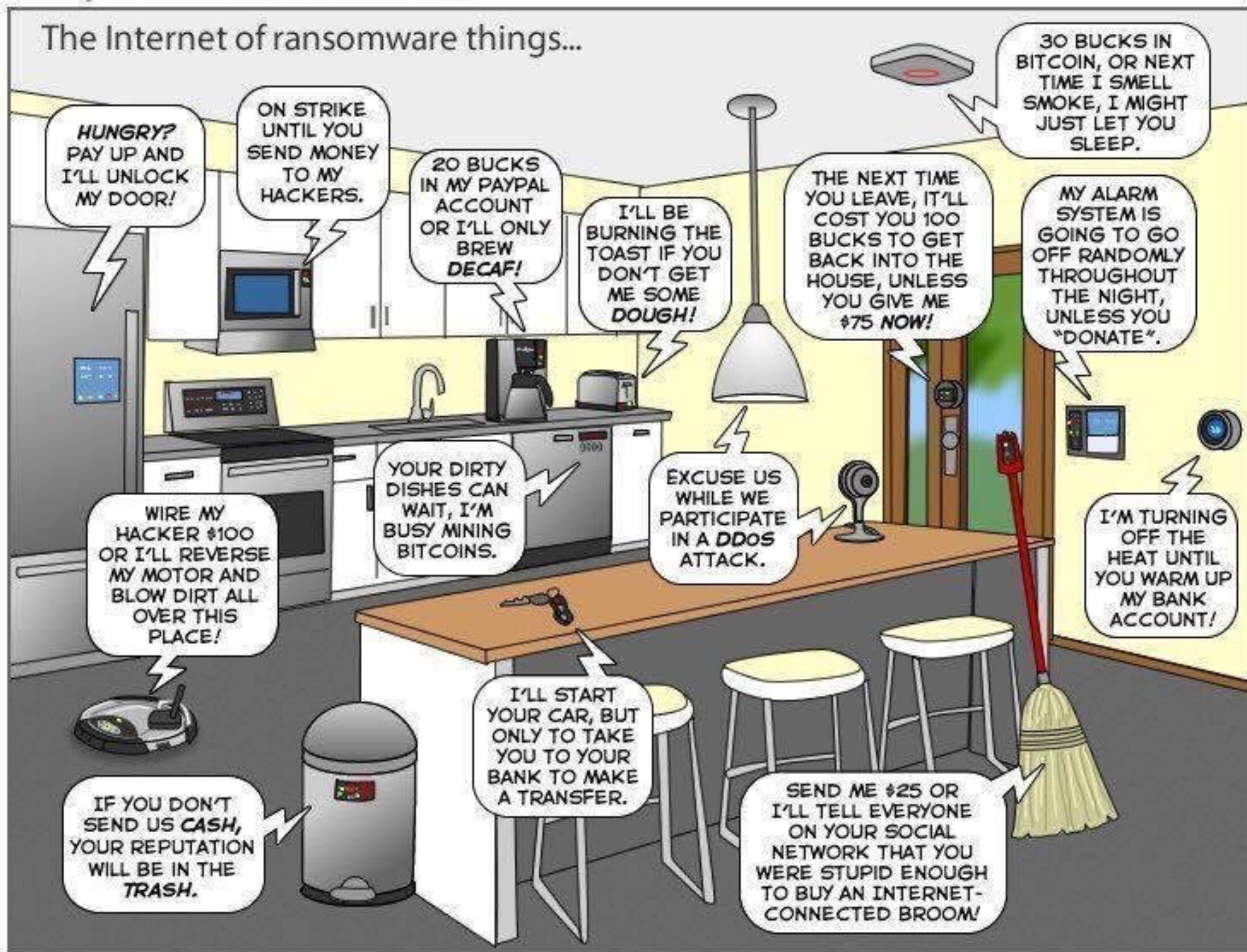
INTERNET OF THINGS

KEYWORDS WITH ICONS

Eight Top Ideas by Insurers for the IoT



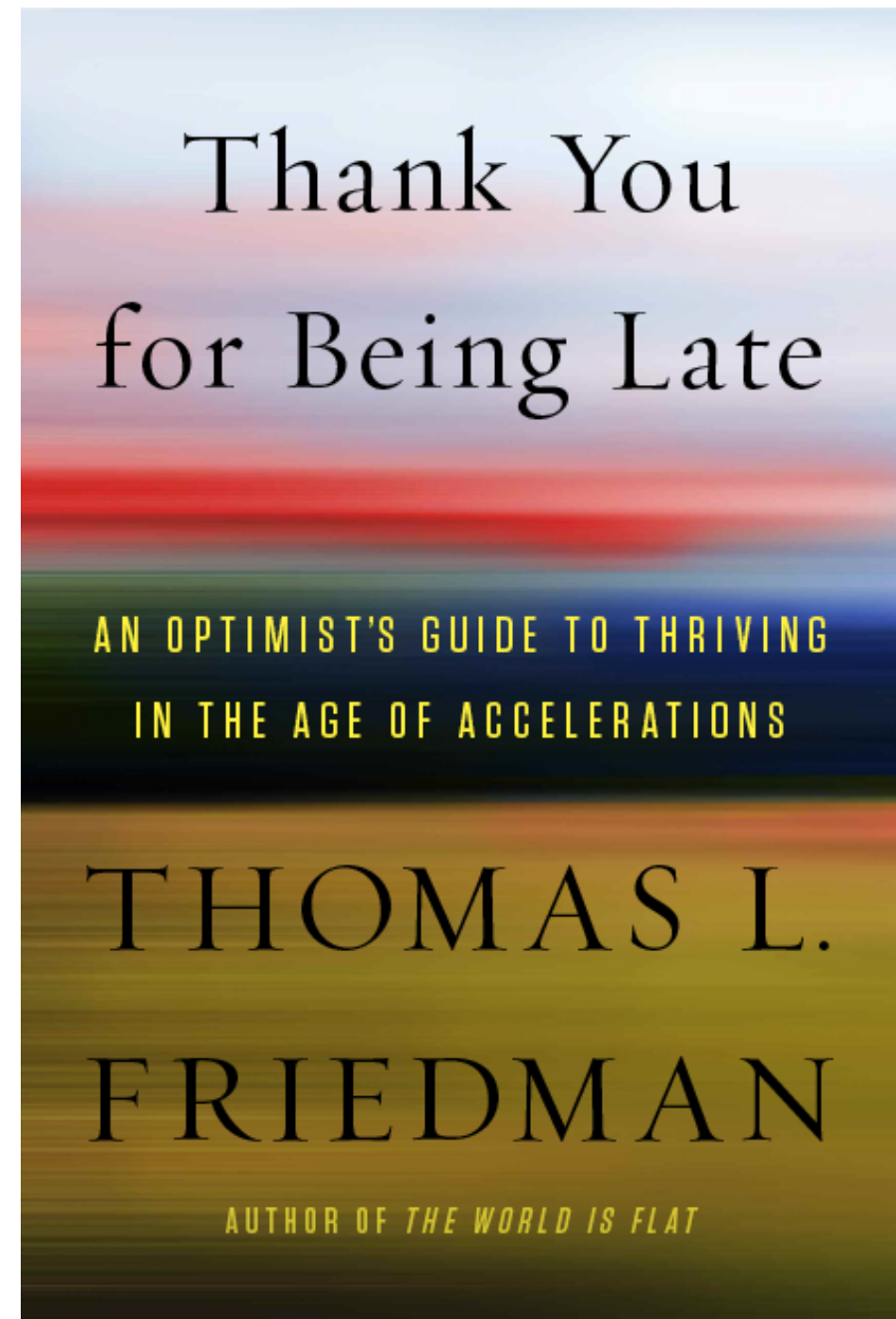
The Internet of ransomware things...



Suggested Reading

*Thank You for Being Late -
An Optimist's Guide
to Thriving in the
Age of Accelerations*

Thomas L. Friedman

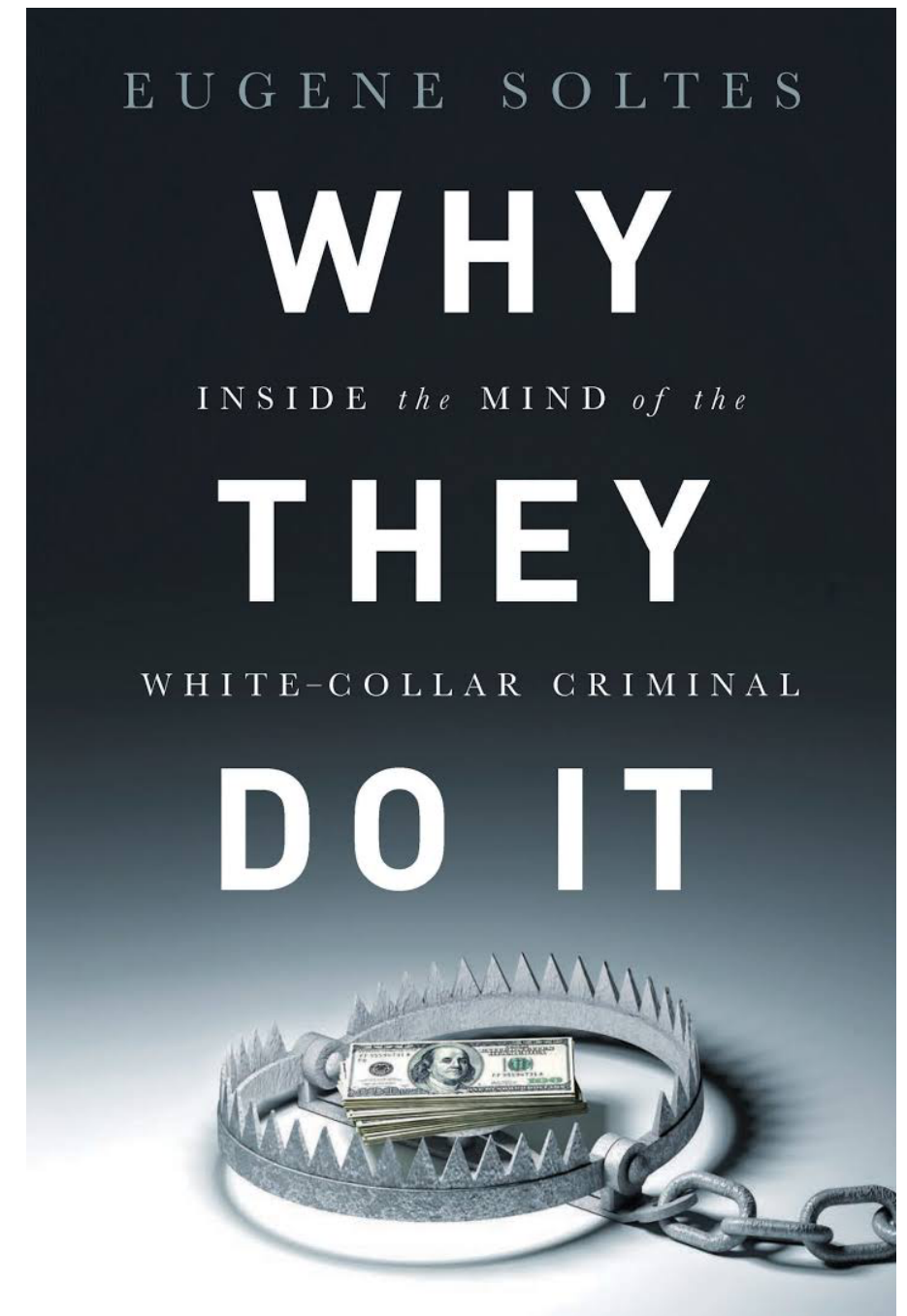


<http://www.thomaslfriedman.com/thank-you-for-being-late/>

Suggested Reading

*Why They Do It -
Inside the Mind of a
White-Collar
Criminal*

Eugene Soltes



<https://www.amazon.com/Why-They-Do-White-Collar-Criminal/dp/1610395360>

Thank You!

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